

CLIMATOLOGICAL DATA FOR JULY, 1911.

DISTRICT No. 2, SOUTH ATLANTIC AND EAST GULF STATES.

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GENERAL SUMMARY.

A marked regression of temperature in midsummer in the South Atlantic and east Gulf States is unusual, and it must be considered rather remarkable that the average temperature of the district for July was nearly a degree lower than for June. The normal rise in temperature from June to July took place only in Virginia and North Carolina; in the remaining States of the district July, 1911, ranged from 1° to nearly 3° cooler than June. The Gulf States especially experienced quite moderate temperatures for the midsummer season; after the first few very warm days of July the day temperatures were not excessively high and the nights were cool and pleasant, resulting in deficiencies in monthly mean temperatures at nearly all stations in Georgia, Florida, Alabama, and Mississippi. In Mississippi and Alabama the State average temperatures were as low as ever before experienced in July, and in Georgia new minimum records were established at many stations. In Virginia and the Carolinas, on the other hand, the intense heat that characterized the preceding month continued almost unabated to the middle of July, culminating in maximum temperatures well above 100° on the 11th. But even in these States a period of decidedly cooler weather followed, and in all portions of the district the lowest temperatures for the month occurred during the last week.

The precipitation for the month was very irregularly distributed, and despite the frequency of rains drought continued to prevail in many portions of the Carolinas and Virginia, causing for a few days the complete exhaustion of the water supply at a few cities in western North Carolina. In Georgia the rainfall was normal, while in the western portion of the district a moderate excess in precipitation occurred. In all portions of the district the month was characterized by the frequency of light local showers entirely convectional in character. Except in Florida, where showers fell on every day of the month, a general period of fair weather prevailed from about the 26th to 30th. The total rainfall was less than 1 inch at only 7 stations, and exceeded 10 inches at 10 out of 357 stations reporting. Thunderstorms were numerous, but with one or two exceptions were unusually mild in character.

The atmospheric pressure ranged during most of the month between 30 and 30.2 inches, rarely falling below normal, and no well-defined barometric depression was observed in the district during the month. The lowest pressure for the district was 29.76 inches at Lynchburg and Norfolk, Va., on the morning of the 24th, and the highest was 30.28 inches on the 9th at Hatteras and Wilmington, N. C., and at Columbia, S. C.; giving a range of only 0.52 inch.

Aside from the damage by drought to crops in portions of Virginia and the Carolinas, the month as a whole was

favorable for agricultural interests. The amount of sunshine was much below the normal in the western portion of the district, elsewhere it was about normal. Vegetation in the Gulf States recovered to a large extent from the effects of heat and drought earlier in the season.

TEMPERATURE.

The temperature during July as revealed by the State averages was generally below normal, except in North Carolina and Virginia, where a moderate excess was recorded. The State means, however, do not properly indicate the march of temperature during the month, the deficiencies being brought about by the period of decidedly cooler weather during the last half of the month, while the earlier portion was intensely warm, especially in the northern portion of the district. The region of greatest deficiency in monthly mean temperatures comprises central Georgia and the northern portion of the Alabama and Mississippi areas, where at some stations the negative departures exceeded 3°.

Following are the most important details with reference to temperature for the separate States. In Virginia from the 2d to 13th, inclusive, a large number of stations reported daily maximum temperatures of 90° or above, culminating in 102° at Collaville on the 11th, which was generally the warmest day of the month. Fortunately the night temperatures were not correspondingly high and consequently prostrations were few in Virginia. During the latter part of the month there were several other days of excessive heat, and at several places the greatest number of days with the temperature above 90° on record occurred. In North Carolina also the weather was unusually warm during the first 10 days with the highest temperatures in the west on the 3d and in the central-eastern portion of the State on the 11th, the maximum reaching 104°. In South Carolina high temperatures continued until the 12th. In the remaining portions of the district the period of greatest heat terminated about the 4th, except in Florida where moderately high temperatures were registered on several dates throughout the month.

During the latter portion of July the temperature was decidedly lower especially from the 26th to 28th, resulting in deficiencies in the State means, which averaged about 2° for Georgia, Alabama, and Mississippi. In Mississippi the weather was free from the excessive heat common to July, the average maximum temperature being the lowest on record for the month in over 20 years; a monthly mean as low as that for the current month occurred only in July, 1904. In Alabama also the month was unusually cool. At Birmingham it was the coolest July since the establishment of the station in 1893, and at Montgomery the month was as cool as any July in the past 39 years. The minimum temperatures during the period from the 26th

to 28th were abnormally low. At Lenoir, N. C., the minimum, 46° on the 26th, was 5° lower than the previous July minimum for that station. The lowest at Mineral Bluff, Ga., 46° on the 26th, equals the previous lowest record for the State of Georgia made at Diamond in July, 1897.

The mean temperature for the entire district was 78.8° and the departure -0.8° . The monthly mean for June was 79.7° . The highest monthly mean at individual stations was 82.8° at Heath Springs, S. C., and Eustis, Fla. The highest monthly means in North Carolina and Virginia exceeded those in Georgia, Alabama, and Mississippi—a rare occurrence. The lowest monthly means were 68.1° at Hot Springs, Va., and 68.3° at Rock House, N. C. The highest temperature for the district was 107° at Valdosta, Ga., on the 1st, followed by 104° at Weldon, N. C., on the 11th, and the lowest was 43° at Hot Springs, Va., on the 26th.

PRECIPITATION.

With reference to the important element of precipitation the most salient facts are the unusual frequency of light local rains, even in the regions suffering from drought, and the extreme irregularity in the distribution of rainfall. In Florida showers fell at some point on every day of the month, while even in Virginia there were only five generally fair days. As a rule over most of the district but one distinct period of fair weather prevailed, namely, from the 26th or 27th to the 29th or 30th of the month. The number of days with appreciable rainfall was above the normal in all the Gulf States and in South Carolina, and but slightly below in the northern portion of the district, ranging from 14 days in the Mississippi area to 7 days in Virginia.

The State averages were slightly above normal in Alabama and Mississippi, and in the latter State during the first week rains were excessive and damaging in several southern counties, and heavy rains occurred locally at intervals throughout the month. In Georgia the rainfall was normal, but the distribution was so irregular that deficiencies of nearly 4 inches occurred along the coast, and excesses of from 3 to 4 inches in the northwestern counties. In the remaining States of the district the rainfall was decidedly below normal, the deficiency exceeding 2 inches in North Carolina and Virginia. The State mean for North Carolina, 3.10 inches (deficiency 2.77 inches), is lower than any previous July average in the past 30 years except in 1902, when it was 2.74 inches. In Virginia the month was one of uneven and scanty rainfall, resulting without doubt in great damage to crops in many sections. At Richmond the total rainfall was the smallest for July in the past 40 years.

The regions of least precipitation are found over the headwaters of the Roanoke River in Virginia, in eastern and south-central North Carolina, and in very limited areas in South Carolina and Florida, where the monthly totals were under 2 inches. The maximum rainfall of from 6 to 10 or more inches occurred over considerable areas in the lower valleys of the Pearl and Pascagoula Rivers, in southwestern Alabama, and the watersheds of the upper Tombigbee and Black Warrior, in the Chattahoochee Basin and in widely separated regions of the Florida Peninsula.

The average rainfall for the district was 4.84 inches and the departure -0.88 inch. On the average 2.50 inches more rain was received during July than during June. The largest monthly rainfall was 13.26 inches at

Merrill, Miss., closely followed by 12.20 inches at Live Oak, Fla. Totals exceeding 10 inches also occurred at Pearlington and Waynesboro, Miss., at Daphne, Ala., and at St. Leo, Bartow, Fenolloway Homestead, and Inverness, Fla. The smallest total was 0.57 inch at Richmond, Va. The maximum fall in 24 hours was 4.85 inches on the 14th at Pinopolis, S. C. Heavy rains fell at a few places in each State in the district.

RIVER CONDITIONS.

In the Gulf States the frequent and abundant rainfall resulted in a moderate increase in the flow of the rivers, culminating in the highest stage about the 15th to 25th, but flood stages were not attained at any point. The most pronounced rise took place in the Pascagoula River at Merrill, Miss., where a stage of 18 feet was reached on the 22d. (Flood stage, 20 feet.) A moderate rise also took place in the Oconee River, a stage of 11.7 feet being attained at Milledgeville, Ga., on the 15th. (Flood stage, 25 feet.)

In all other portions of the district the rivers continued exceptionally low and the ranges between the highest and lowest stages were very small. At 30 river stations out of 36 located in Georgia, the Carolinas, and Virginia the mean stages for July, 1911, were much below the normal for the month. The average stage of the Cape Fear River at Fayetteville, N. C., was 2.5 feet, the lowest for July with one exception in 17 years. The mean stage of the Pee Dee River at Smiths Mills, S. C., was -0.4 foot, the lowest in 16 years, and of the Black River at Kings-tree, S. C., -2.0 feet, the lowest in 18 years. The Waccamaw River at Conway, S. C., reached the lowest point on record, -0.1 foot on the 26th. If during autumn, usually the driest season of the year, only normal rainfall is received the rivers may be expected to attain even lower stages during the remainder of the year.

MISCELLANEOUS PHENOMENA.

The average number of clear days in the district ranged from 8 in Florida, Alabama, and Mississippi to 15 in North Carolina and 17 in Virginia; the number of cloudy days averaged 10 in the first three States named and 4 in the northern portion of the district. The prevailing winds were from the southwest in all sections, with a very light movement. The average hourly velocity exceeded 10 miles an hour only at Hatteras, N. C., and no gales of 40 miles an hour were reported.

An unusually brilliant and large meteor was observed on July 4 at about 8.45 a. m. in Florida, which moved rapidly from west to east over the towns of Gainesville, Fairbanks, Waldo, and Melrose, with a roaring sound. Small pieces thrown off by the meteor scintillated like stars, and the meteor exploded a short distance north of Melrose.

A fine series of about five waterspouts was observed about 3 miles south of Morehead City, N. C., on the afternoon of July 26.

Thunderstorms were frequent during the first half of the month, the largest number occurring on the 11th, 12th, and 13th. The following severe wind and hail storms are worthy of note:

Alabama.—A destructive windstorm on the 2d south of Antioch Church in the southeastern part of Pike County, Ala., devastated an area of about 2 square miles. Homes, barns, and forest trees were blown down, but no lives were lost.

Georgia.—On Monday afternoon, July 3, a most destructive hail and wind storm swept across the northern end of Wilkes and Lincoln Counties, Ga. The path of the storm was about 4 miles wide and 8 to 10 miles long; the hailstones were very large. Crops on more than 10,000 acres were partially destroyed; hogs and poultry were killed, and trees were stripped of their foliage. Three negro women were reported to have been killed by lightning.

North Carolina.—A severe hailstorm occurred in the vicinity of Apex, Wake County, N. C., on the afternoon of July 18, which is said to have destroyed over 100 acres of tobacco.

Florida.—A severe windstorm occurred at Robinson Point, Fla., at 5.30 p. m. July 8, 1911. The direction of the wind was from the east. A downpour of hail and rain followed the storm; some of the hailstones were one-fourth inch in diameter. The débris lay due west of the center of the line of greatest destruction, the width of the path at that point being 200 feet. No persons were killed, but the sawmill of the Robinson Point Lumber Co. was damaged to the extent of about \$500. The roofs of the planing mill and drying sheds were blown off and piles of lumber on the wharf were scattered in every direction. The wind for a few moments was terrific, carrying large pieces of timber hundreds of yards away.

THE DROUGHT OF 1911 IN NORTH CAROLINA.

By LEE A. DENSON, Section Director, Raleigh, N. C.

The precipitation in North Carolina during the period from January 1 to July 31, 1911, has been remarkably small. The average amounts recorded at 75 stations is

20.32 inches, or 10.30 inches below the normal, and 4.18 inches less than any previous record for the period. Prior to this year the smallest average was 24.50 inches in 1902.

The State averages for 1911 were as follows: January, 2.92 inches; February, 2.09; March, 3.69; April, 4.14; May, 1.27; June, 2.78, and July, 3.43—all below the normal except April, which, however, was also decidedly below normal in the eastern district.

The accompanying table gives the average precipitation for North Carolina from January 1 to July 31 for the past 25 years:

Year.	Amount.	Year.	Amount.	Year.	Amount.
1887.....	28.23	1896.....	30.84	1905.....	32.61
1888.....	30.14	1897.....	30.76	1906.....	36.08
1889.....	33.76	1898.....	25.46	1907.....	27.54
1890.....	24.57	1899.....	36.46	1908.....	34.08
1891.....	35.78	1900.....	31.14	1909.....	32.90
1892.....	32.96	1901.....	35.29	1910.....	29.80
1893.....	29.66	1902.....	24.50	1911.....	20.32
1894.....	25.22	1903.....	34.59		
1895.....	35.06	1904.....	25.69	Mean.....	30.62

As a result of the prolonged drought the soil is unusually dry to a considerable depth, streams are very low, many wells have failed entirely, and in several cities the water supply is low. The most dramatic event connected with the drought was the complete exhaustion of the water supply of the city of Charlotte. For several days the water was entirely cut off, and supplies for drinking and cooking purposes had to be hauled to the city in tank cars. The city was patrolled most carefully to guard against fire. However, the drought has not had a disastrous effect on vegetation, since light rains have been well distributed.

TABLE 1.—Climatological data for July, 1911. District No. 2, South Atlantic and east Gulf States.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.	Prevailing wind direction.	Observers.					
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Greatest in 24 hours.	Departure from the normal.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
Virginia.																					
Arvonia.	Buckingham.	350	7	78.2	+ 0.8	100	7	55	23†	38	1.06	- 2.71	0.67	0	6	10	19	2	sw.	Rev. Plummer F. Jones.	
Ashland.	Hanover.	221	20	78.0	- 0.6	98	7	57	23†	30	1.41	- 3.61	0.66	0	6	2	29	0	se.	E. L. C. Scott.	
Bedford City.	Bedford.	947	1	77.8	-	99	7	58	26	33	2.74	-	1.90	0	6	16	15	0	e.	C. Hayes Tayler.	
Buchanan.	Botetourt.	820	7								3.47	- 1.37	1.41	0	8				w.	D. D. Booze.	
Callaville.	Brunswick.	250	17	78.2	+ 2.1	102	11	54	26	35	1.85	- 3.70	0.77	0	5	14	17	0	w.	F. M. Gage.	
Cape Henry.	Princess Anne.	20	37	78.0	+ 0.5	99	10	64	29	21	1.90	- 3.95	0.50	0	9	23	4	4	sw.	U. S. Weather Bureau.	
Catawba.	Roanoke.	1,760	1	74.6	-	91	3	51	27	33	6.63	-	2.20	0	11	23	8	0	sw.	State Sanitarium.	
Charlottesville.	Albemarle.	800	22	79.4	+ 3.3	101	7	59	26†	30	2.96	- 2.52	1.50	0	5	17	11	3	sw.	Leander McCormick Obsy.	
Clarksville.	Mecklenburg.	17									1.78	-	2.67	0.70	0	6	13	0	0	e.	J. A. Ligon.
Columbia.	Fluvanna.	246	13	76.0	- 0.4	96	7	54	19†	35	1.85	- 2.87	0.46	0	5	16	11	4	ne.	Chesapeake & Ohio Ry.	
Covesville.	Albemarle.	800	1	76.2	-	96	7†	52	31	38	1.92	-	1.00	0	3				e.	F. H. Cole.	
Danville.	Pittsylvania.	413	11								3.14	- 0.78	1.55	0	6				e.	C. G. Watkins.	
Diamond Springs.	Princess Anne.	20	1	79.6	-	100	11	57	26	32	3.44	-	2.71	0.99	0	8	16	10	5	e.	Va. Truck Expt. Sta.
Hampton.	Elizabeth City.	5	28	80.0	+ 1.5	97	11	64	26	35	2.44	-	0.57	0	7	22	1	8	e.	Normal & Agr. Inst.	
Hot Springs.	Bath.	2,195	19	68.1	- 1.3	66	6†	43	26	38	2.73	-	1.12	0.57	0	14	20	8	3	e.	F. M. Terry.
Ivor.	Southampton.	87	2	78.2	-	100	10	51	26	34	2.49	-	0.75	0	6				e.	N. & W. Ry. Expt. Farm.	
Lassiter.	Goochland.	100	1								3.25	-	2.50	0	2	29	2	0	e.	T. J. Davis.	
Lexington.	Rockbridge.	1,060	34	74.8	+ 0.3	99	2†	46	26	39	2.33	-	1.65	0.48	0	11	22	5	4	n.	Virginia Military Institute.
Lynchburg.	Campbell.	685	40	77.4	+ 0.1	97	3	56	26	30	5.53	+ 1.50	4.17	0	7	14	17	0	n.	U. S. Weather Bureau.	
New Castle.	Craig.	1,300	2								5.07	-	1.79	0	10	16	2	13	s.	Miss J. L. Martin.	
Norfolk.	Norfolk.	91	41	79.2	+ 0.8	97	11	64	26	24	5.10	-	0.70	1.50	0	12	13	5	3	s.	U. S. Weather Bureau.
Petersburg.	Dinwiddie.	60	24	80.0	+ 2.4	101	10	59	23	32	1.57	- 3.32	0.65	0	3	25	3	3	w.	Central State Hospital.	
Randolph.	Charlotte.	334	7								2.34	-	0.80	0	5				w.	H. G. Holt.	
Richmond.	Henrico.	144	32	79.6	+ 0.4	100	7	60	26	30	0.57	- 3.85	0.39	0	3	7	19	5	sw.	U. S. Weather Bureau.	
Rocky Mount.	Franklin.	1,150	17	76.2	+ 0.4	100	3	51	28	38	1.85	-	4.27	0.64	0	4			e.	G. W. B. Hale.	
Saxe.	Charlotte.	350	8	81.4	-	100	3†	57	26	34	2.61	-	1.18	0	6	18	3	10	sw.	State Experiment Farm.	
Spottsylvania (near).	Surry.	15	23	78.7	+ 1.1	100	10†	58	14	32	1.83	-	4.41	0.98	0	5	17	8	6	sw.	B. W. Jones.
Williamsburg.	James City.	70	20	78.6	+ 1.8	99	11	56	26	30	5.60	+ 0.45	2.25	0	6	25	6	0	sw.	Eastern State Hospital.	
North Carolina.																					
Albemarle.	Stanly.			78.9	-	100	11	55	29	38	1.31	-	0.64	0	9	17	14	0	sw.	M. J. Harris.	
Beaufort.	Carteret.	10	10	81.0	+ 1.2	90	8	70	1†	19	1.91	- 3.38	0.52	0	8	22	5	4	sw.	H. D. Aller.	
Belhaven.	Beaufort.	4	2	80.2	-	101	11	59	1†	32	3.15	-	1.40	0	5	20	8	3	s.	W. S. Hopkins.	
Brewers.	Wilkes.	1,950	14	75.0	- 0.6	97	3	50	27†	38	2.46	-	3.14	1.00	0	8	9	22	0	w.	W. L. Brewer.
Caroileen.	Rutherford.	806	11	79.2	+ 0.9	101	3	57	25†	38	2.73	-	1.96	1.13	0	7	11	20	0	sw.	S. B. Tanner.
Chalybeate Springs.	Harnett.	500	5	77.6	-	98	11	55	27	33	3.73	-	0.85	0	9	20	9	2	sw.	J. A. Smith.	
Charlotte.	Mecklenburg.	773	35	78.8	+ 0.1	95	3	62	26	26	2.86	-	2.63	0.82	0	11	8	18	5	sw.	U. S. Weather Bureau.
Chimney Rock.	Rutherford.	1,150	1	75.2	-	94	3	53	27	33	3.67	-	0.92	0	12	17	14	0	w.	J. M. Flack.	
Durham (near).	Durham.	406	2								1.89	-	1.38	0	6				e.	J. H. Michie.	
Eagleton.	Northampton.	66	6	79.4	-	100	11	58	26	30	6.95	-	3.31	0	6	21	9	1	sw.	J. T. Elliott.	
Edenton.	Northampton.	66	6	79.4	-	100	11	58	26	30	6.95	-	4.22	1.00	0	4	14	10	7	s.	E. R. Conger.
Elizabethtown.	Chowan.	30	17	79.8	+ 0.2	95	11	61	1	26	2.90	-	4.22	1.00	0	4			e.	J. W. Hall, Jr.	
Enfield (near).	Bladen.	60									0.70	-	0.32	0	3				e.	T. S. Inboden.	
Fayetteville.	Halifax.	99									3.93	-	1.72	0	9				e.	Frank Glover.	
Cumberland.	Cumberland.	170	24	80.0	+ 0.9	98	11	61	27†	32	2.59	-	4.59	0.87	0	10	19	7	5	s.	Mrs. N. B. Taylor.
Goldsboro.	Wayne.	102	41	78.6	- 1.2	98	11	61	26	32	2.82	-	3.69	1.21	0	7			e.	Dr. W. R. Goley.	
Graham.	Alamance.	656	9								2.21	-	0.69	0	6				e.	A. H. Horry.	
Greensboro.	Guilford.	843	30	76.7	- 1.4	99	7	59	27†	34	2.22	-	2.89	1.04	0	8			e.	R. M. Hearne.	
Greenville.	Pitt.	75	18								4.03	-	2.79	1.45	0	12			e.	U. S. Weather Bureau.	
Hatteras.	Dare.	11	37	79.0	+ 0.4	88	11	67	1	16	1.03	- 5.10	0.38	0	8	20	8	3	sw.	Enoch Powell.	
Henderson.	Vance.	508	18	78.2	+ 0.1	97	11	57	26	31	8.11	+ 2.32	4.02	0	8	15	15	12	sw.	Rev. C. J. Strang.	
Kings Mountain (near).	Gaston.	952	10	80.3	-	103	22	56	26	37	2.00	-	1.53	0	6	16	12	2	sw.	H. C. V. Peebles.	
Kinston.	Lenoir.	46	13	81.4	+ 0.6	101	11	62	26	32	2.45	-	4.24	0.49	0	10	19	8	4	sw.	G. M. Goforth.
Lenoir.	Caldwell.	1,186	38	75.6	+ 0.6	98	3	46	26	40	4.11	-	0.84	1.25	0	10	30	1	0	sw.	S. P. Houser.
Lincolnton.	Lincoln.	994	6	76.4	-	95	3†	51	26	37	1.35	-	0.38	0	11	0	31	0	sw.	T. B. Wilder.	
Louisburg.	Franklin.	375	20	78.4	+ 0.3	98	11	58	26	39	5.84	+ 0.47	2.00	0	6	17	14	0	sw.	B. M. Davis.	
Lumberton.	Robeson.	102	28	80.0	- 0.3	98	11†	58	26	33	3.75	- 2.19	1.42	0	11				sw.	U. S. Weather Bureau.	
Manteo.	Dare.	12	6	79.0	-	97	11	59	1†	27	1.92	-	0.62	0	8	17	10	4	sw.	Sergt. Thos. McGuire.	
Marion.	McDowell.	1,425	19	74.6	- 1.0	98	3	49	26	33	4.19	-	1.21	1.16	0	12	17	2	sw.	J. S. Mann.	
Middletown.	Hyde.	4		78.5	-	95	11	61	1	23	2.82	-	1.10	0	7	18	11	2	sw.	B. J. Utley.	
Moncure.	Chatham.	145	17	78.2	- 0.6	98	2†	54	26	37	3.81	-	1.13	1.03	0	8	12	3	16	sw.	T. A. Ashcraft.
Monroe.	Union.	536	17	78.2	+ 0.7	99	11	52	26	40	1.96	-	3.27	0.54	0	8	17	10	4	sw.	H. D. Judd.
Morganton.	Burke.	1,135	24	76.2	+ 0.2	98	3	50	26†	40	2.68	-	2.46	1.35	0	11	26	4	1	sw.	Prof. A. H. Merritt.
Mount Airy.	Surry.	1,048	23	76.4	+ 1.2	98	3	49	27	40	2.55	-	2.93	1.10	0	7	25	6	0	sw.	J. W. Holland.
Mount Holly.	Gaston.	616	14								2.37	-	3.99	0.86	0	9			e.	J. B. Bodie.	
Nashville.	Nash.	190	7	78.8	-	99	11	60	29	30	5.08	-	2.10	0	8	8	1				

TABLE 1.—Climatological data for July, 1911. District No. 2—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.			Date.	Lowest.	Greatest daily range.	Total.	Departure from the normal.			Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
					Highest.	Date.	Greatest daily range.					Greatest in 24 hours.	Total.	Number of rainy days, 0.01 inch or more.								
<i>South Carolina.</i>																						
Aiken.	565	27	80.4	-0.8	99	3	63	16†	28	1.80	-3.31	0.45	0	6	22	6	3	w.	Dr. H. T. Hall.			
Allendale.	186	23	79.4	-1.6	100	12	57	27	33	6.28	+0.71	1.59	0	12	8	17	6	w.	A. R. Hiers.			
Anderson.	764	10	78.8	-0.1	98	1	57	26†	30	4.96	+0.07	1.20	0	12	15	0	16	w.	H. H. Russell.			
Batesburg.	656	23	78.6	-1.3	96	22	59	26	30	3.41	-1.91	1.59	0	9	17	4	16	n.	E. J. Hite.			
Beaufort.	20	25	78.6	-3.0	89	24	65	27†	20	6.58	+0.78	2.00	0	6	8	23	0	sw.	Miss Lillian H. Rice.			
Blackville.	296	22	82.0	+0.3	100	5	60	25†	35	0.91	-4.42	0.20	0	7	13	12	6	sw.	Miss M. E. Lange.			
Blairs.	293	6								3.05		1.17	0	7	13	9	9	s.	John R. Ragsdale.			
Bowman.	160	10	79.2	-1.3	98	2	54	27	37	2.54	-2.13	0.88	0	13	14	15	2	w.	B. O. Evans.			
Calhoun Falls.	508	18								4.49	-0.96	1.40	0	7	15	2	8	sw.	W. C. Brown.			
Camden.	222	45	80.5		97	23	55	29	39	3.60	-1.40	0.98	0	9	21	2	8	sw.	Jas. C. Faris.			
Catawba.	562	6								2.51		0.66	0	10	16	7	8	s.	W. R. Zimmerman.			
Chappells.	402	6								1.80		0.70	0	6	18	0	13	sw.	U. S. Weather Bureau.			
Charleston.	48	41	80.6	-0.7	94	21	65	26	21	2.23	-5.03	0.90	0	11	7	20	4	se.	J. H. Powe.			
Cheraw.	144	23	78.8	-1.1	96	11†	58	26†	30	0.83	-5.17	0.21	0	7	21	5	5	e.	Prof. John N. Hook.			
Clemson College.	850	20	76.3	-2.5	94	1	56	26	26	5.63	+0.30	1.82	0	9	19	9	3	s.	U. S. Weather Bureau.			
Columbia.	351	25	79.8	-1.3	95	23	60	26	28	2.30	-3.76	0.72	0	14	2	14	15	sw.	P. C. Quattlebaum.			
Conway.	25	19	80.2	+0.4	98	11	63	26†	30	5.48	-1.28	1.34	0	8	12	5	14	sw.	D. C. McCall.			
Darlington.	175	16	78.8		97	11†	57	26†	37	2.30	-2.76	0.55	0	9						A. E. Rowell.		
Dillon.	100	7	79.8	-0.8	98	11	58	27	33	4.07	-1.69	1.71	0	12						H. B. McCall.		
Effingham.	106	19								4.92	+1.05	0.98	0	9	23	0	8	w.				
Ferguson.	51	3	81.6	+2.5	98	11	64	26	27	5.90	-0.26	2.50	0	13	15	9	7		Dr. Jas. R. Des Portess.			
Florence.	136	23	82.2	+0.8	102	11†	61	27	34	1.55	-4.05	0.65	0	9	18	3	10	sw.	H. K. Gilbert.			
Georgetown.	12	18	80.6	+0.1	97	11	64	18†	27	3.71	-3.68	1.50	0	5	6	14	11		A. P. Hazard.			
Greenville.	989	19	76.0	0.0	94	3	58	26	32	6.56	+1.18	2.39	0	9	21	5	5	e.	Spartan Goodlette.			
Greenwood.	671	23	79.4	-0.6	96	1†	57	26	31	5.45	+0.82	1.38	0	9	25	0	6	w.	M. M. Calhoun.			
Heath Springs.	568	10	82.8		100	7†	63	14	30	3.04		0.39	0	8	23	7	1	sw.	J. A. Weamer.			
Jacksonboro.	13	3	78.6		92	11†	59	27	27	0.95		2.39	0	13	4	17	10	w.	W. E. Haskell, jr.			
Kingstree.	54	23	80.4	-0.2	99	11†	58	26†	34	4.11	-1.72	2.20	0	5	18	5	8	s.	A. O. Matthews.			
Liberty.	900	17	78.4	-0.7	102	3	56	26†	33	5.66	+0.26	2.25	0	11	12	17	2	sw.	John T. Boggs.			
Little Mountain.	711	18	80.4	-0.2	98	2	59	26	31	2.96	-1.94	0.65	0	12	18	3	10	w.	J. M. Sease, M. D.			
Meriwether.	2	19	79.6		98	1†	59	27	31	3.84		1.06	0	7	7	5	15		Wm. S. Middleton.			
Newberry.	502	7	80.3	0.0	98	11†	56	26	32	2.27	-3.10	1.32	0	14	5	22	4	w.	W. G. Peterson.			
Pelzer.	873	6								2.88		0.70	0	9	22	5	4	w.	John M. Ward.			
Pinopolis.	55	18								7.10	+0.88	4.85	0	12						Miss E. P. Ravanel.		
St. George.	109	23	81.9	+1.1	97	11	61	26	28	4.48	-1.50	1.50	0	13	26	2	3		G. T. Lewis.			
St. Matthews.	209	23	80.0	0.0	94	11†	65	26†	24	2.25	-3.52	0.78	0	9	16	0	15		J. S. Wannamaker.			
Saluda.	530	9	79.0		99	6	53	27	39	4.18		1.25	0	11	21	8	7		Mrs. F. V. J. Maxwell.			
Santuc.	512	16	79.9	+0.7	100	6	60	27†	34	3.71	-1.28	1.29	0	10	7	17	7	sw.	E. W. Jeter.			
Smith Mills.	62	16								3.67	-2.75	1.51	0	9	22	2	7	e.	W. G. Walker.			
Society Hill.	192	20	78.8	-0.6	94	6†	61	26†	24	2.45	-3.73	0.55	0	11	18	7	6	sw.	Maj. J. J. Lucas.			
Spartanburg.	875	20	79.0	-0.3	99	3	55	26	31	1.91	-2.67	1.17	0	11	13	4	14		F. P. Robinson.			
Summerville.	75	14	79.6	-0.1	95	31	59	27	33	3.54	-3.10	1.02	0	16	4	27	0	sw.	Miss E. H. Gadsden.			
Trenton.	620	18	80.4	0.0	100	1	60	26	34	3.43	-2.34	1.66	0	7	10	21	0	w.	C. A. Long.			
Walterboro.	69	7	80.6		99	11†	57	27	40	7.36		3.00	0	13	11	10	10		J. A. Westerberg.			
Wimberley.	545	21	79.4	+0.3	96	23	60	26	26	2.18	-2.03	0.70	0	8	20	10	1	s.	J. W. Seigler.			
Winthrop College.	690	12	79.5	-0.3	97	23	59	26	28	3.91	-0.29	1.57	0	8	20	6	5	sw.	E. R. Rivers.			
Yemassee.	23	16	78.9	-2.5	95	3	58	28	34	5.18	-1.68	1.55	0	12	22	2	7		J. G. Hutson.			
<i>Georgia.</i>																						
Abbeville.	Wilcox.	8								7.91		1.85	0	15	6	14	11	w.	W. H. Calhoun.			
Adairsville.	Bartow.	772	19	77.6 ^d	-1.0	98	3	54	26	31	4.50	-0.65	1.88	0	8	14 ^c	13 ^c	1 ^c		Dr. J. P. Bowdoin.		
Albany.	Dougherty.	230	26	80.6	-2.3	98	1	60	27	29	4.25	-1.43	0.70	0	19	15	4	12	sw.	George C. Brosnan.		
Alapaha.	Berrien.	293	22							4.58	-1.21	1.12	0	11	1	23	7	sw.	James T. Austin.			
Americus.	Sumter.	362	28	78.4	-3.9	98	1†	58	26†	29	3.02	-2.12	1.10	0	8	16	1	14	s.	F. P. Harrold.		
Athens.	Clarke.	604	34	77.9	-0.4	97	1†	56	26	30	7.38	+2.51	2.03	0	10	15	7	9	se.	G. D. Cox.		
Atlanta.	Fulton.	1,218	46	76.3	-2.3	96	1	59	26	25	5.52	+1.28	1.70	0	15	4	8	19	sw.	U. S. Weather Bureau.		
Augusta.	Richmond.	180	45	79.7	-2.0	94	3	62	26	26	5.27	+0.49	2.38	0	13	3	18	10	sw.	Do.		
Bainbridge.	Decatur.	110	19	80.2	-1.5	100	1	60	26	34	5.78	-0.70	2.12	0	16	17	2	12	ne.	Mrs. C. O. Wimberley.		
Barnesville.	Pike.	875	22	78.7	-2.7	98	1	60	26	28	4.26		1.05	0	11	8	20	3	sw.	Prof. T. O. Galloway.		
Blakely.	Early.	300	20	81.4	-0.4	103	1†	58	28	36	7.60	+0.30	2.18	0	13	5	20	6	sw.	Ralph M. Hobbs.		
Butler.	Taylor.	650	10							8.31	+2.04	1.26	0	15	12	2	17	w.	Mrs. Mamie F. Wallace.			
Camak.	Warren.	613	19	79.8	-0.6	99	1†	58	27	39	6.10	+0.81	2.85	0	10	8	7	16	nw.	J. A. Chapman.		
Canton.	Cherokee.	894	20							7.10	-2.45	1.79	0	10	15	6	10	10	nw.	G. W. Evans.		
Clayton.	Madison.	557	12							6.12	+1.48	3.30	0	5	20	2	9	e.	M. C. Power.			
Clayton.	Rabun.	2,100	17	72.4	-2.0	93	2	50	26†	38	4.98	-2.40	2.00	0	11	21	8	2	w.	A. J. Duncan.		
Columbus.	Muscogee.	262	23	80.2	-0.9	99	1	61	28	30	4.58	-1.21	1.45	0	15	14	4	13	sw.			

TABLE 1.—Climatological data for July, 1911. District No. 2—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Greatest daily range.	Date.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.								
Georgia—Continued.																						
Mineral Bluff.	Fannin.	72.8	—	95	1	46	26	33	5.02	—	1.41	0	15	S	22	1	n.	J. M. Clement.				
Montezuma.	Macon.	292	6	—	1.3	101	1	56	27	31	4.93	—	1.55	0	14	9	8	14	sw.	J. C. Collins.		
Monticello.	Jasper.	800	16	75.8	—	1.1	101	1	56	27	5.34	+ 0.22	1.62	0	12	18	0	13	w.	Miss Maude C. Penn.		
Morgan.	Calhoun.	337	18	—	3.1	98	1	56	26	3.64	— 1.89	0.90	0	10	S	16	7	ne.	W. J. Ragan.			
Newnan.	Coweta.	950	22	76.6	—	3.1	98	1	56	26	9.77	+ 4.08	1.90	0	15	20	0	11	ne.	Mrs. Ida J. Milner.		
Norcross.	Gwinnett.	1,078	—	—	—	—	—	—	—	—	5.50	—	1.60	0	12	13	12	6	sw.	W. O. Medlock.		
Point Peter.	Oglethorpe.	1,000	22	78.5	—	0.6	98	3	56	27	30	9.92	+ 1.79	1.80	0	11	6	24	1	sw.	C. M. Witcher.	
Poulson.	Worth.	365	20	78.8	—	1.1	99	1	55	27	32	6.23	— 0.47	1.21	0	19	10	0	2	s.	Dr. J. F. Wilson.	
Putnam.	Marion.	11	77.6	—	3.2	98	1	58	26	30	6.36	+ 1.99	1.10	0	11	5 ^b	4 ^b	20 ^b	sw.	Mrs. J. M. Collum.		
Quitman.	Brooks.	173	25	78.8	—	2.7	93	1 ^t	60	27	30	5.19	— 2.67	1.17	0	20	0	11	sw.	A. B. Jones.		
Ramhurst.	Murray.	1,363	18	74.2	—	2.9	92	4	52	27	4.73	— 0.42	0.70	0	17	7	19	5	sw.	D. E. Humphreys.		
Resaca.	Gordon.	657	17	—	—	—	—	—	—	—	3.47	— 0.64	0.78	0	8	23	5	3	se.	D. A. Norton.		
Rome.	Floyd.	576	55	77.8	—	2.1	98	3	55	27	31	6.88	+ 2.88	1.76	0	12	13	7	11	w.	W. M. Towers.	
St. George.	Charlton.	4	79.3	—	—	—	—	—	—	—	0.89	—	0.89	0	16	13	2	2	nw.	A. N. Lund.		
St. Marys.	Camden.	20	19	80.0	—	1.0	91	1	60	27	26	4.36	— 1.74	1.81	0	13	3 ^b	6 ^b	sw.	David C. Sterling.		
Savannah.	Chatham.	65	61	79.3	—	2.4	92	11	65	26	22	3.89	— 3.00	2.02	0	12	3	20	9	sw.	U. S. Weather Bureau.	
Statesboro.	Bulloch.	253	11	81.0	—	0.6	99	30 ^t	61	26	35	2.98	— 2.90	0.70	0	10	7	24	0	w.	W. G. Cromley.	
Talibottom.	Talbot.	750	18	79.2	—	0.2	101	1	56	26	36	4.04	— 1.38	0.86	0	15	7	1	23	sw.	Dr. E. L. Bardwell.	
Tallapoosa.	Haralson.	1,150	12	76.4	—	1.8	99	3	54	27	31	9.09	+ 3.78	1.90	0	14	12	7	12	sw.	Elmer C. Bishop.	
Thomasville.	Thomas.	273	29	78.9	—	2.4	97	1	60	27	30	7.61	+ 0.86	1.90	0	19	6	12	13	sw.	U. S. Weather Bureau.	
Tifton.	Tift.	370	—	79.0	—	—	90	30	59	26	32	3.13	— 0.90	0.80	0	8	8	8	sw.	K. C. Moore.		
Toccoa.	Stephens.	1,050	26	76.6	—	1.2	96	3	55	26	26	7.17	+ 1.21	2.05	0	11	23	0	8	w.	Mrs. Alice Starke.	
Valdosta.	Lowndes.	210	6	81.4	—	107	1	59	27	38	7.73	—	1.20	0	10	16	0	15	e.	Miss Annie Twitty.		
Valona.	McIntosh.	10	14	79.2	—	1.2	93	12 ^t	56	28	32	5.33	— 4.33	0.57	0	11	18	13	0	sw.	J. M. Atwood.	
Washington.	Wilkes.	630	23	78.8	—	1.4	96	7	59	26	28	7.95	+ 2.76	2.10	0	10	10	13	8	sw.	Miss Ella B. Smith.	
Waycross.	Ware.	131	22	80.3	—	1.9	97	1	58	26	32	5.39	— 0.60	1.08	0	20	23	1	7	sw.	Thomas Sasser.	
Waynesboro.	Burke.	86	20	78.4	—	3.4	97	1	55	26	35	6.11	+ 0.61	2.15	0	19	15	6	10	w.	Mrs. H. W. Blount.	
West Point.	Troup.	620	22	78.2	—	3.3	98	1	58	26	34	6.12	+ 1.48	2.16	0	17	11	4	16	w.	E. N. Dunn.	
Woodbury.	Meriwether.	641	10	—	—	—	—	—	—	—	7.03	+ 3.55	1.31	0	15	13	9	9	sw.	E. T. Riggins.		
Florida.																						
Apalachicola.	Franklin.	24	7	80.6	—	92	13	66	27	19	6.47	—	1.60	0	10	11	15	5	s.	G. H. Whiteside.		
Arcadia.	De Soto.	61	10	80.8	—	1.0	97	1	65	29	29	5.20	— 3.79	1.14	0	20	2	28	1	e.	C. S. Bushnell.	
Archer.	Alachua.	93	26	80.4	—	1.3	93	1 ^t	64	28	29	5.69	— 3.20	2.00	0	11	—	—	—	sw.	R. B. Hodgson.	
Avon Park.	DeSoto.	150	13	81.0	—	0.6	97	1	67	5	26	8.01	— 0.24	1.49	0	21	4	17	10	sw.	O. R. Thacher.	
Bartow.	Polk.	115	23	80.8	—	0.8	98	22	65	5	27	10.76	+ 3.48	1.86	0	21	1	8	22	se.	William Hood.	
Blountstown.	Calhoun.	2	79.2	—	—	93	1	60	27	29	7.50	—	1.20	0	14	—	—	—	s.	C. L. Hobbs.		
Bradenton.	Manatee.	10	27	79.4	—	1.6	90	16 ^t	67	29	22	8.93	— 1.97	2.00	0	13	5	26	0	sw.	H. H. TenBroeck.	
Brooksville.	Hernando.	126	18	80.5	—	0.2	96	11 ^t	67	47	26	6.11	— 3.81	1.03	0	16	9	18	4	sw.	C. C. Peck.	
Carrabelle.	Franklin.	10	12	—	—	—	—	61	27	—	3.82	— 2.74	0.90	0	10	—	—	—	sw.	J. J. Blomquist.		
Cedar Key.	Levy.	10	22	—	—	93	13	—	—	—	4.43	— 4.22	1.24	0	12	—	—	—	nw.	J. B. Lutterloh.		
Clermont.	Lake.	105	18	82.6	—	0.2	95	1 ^t	65	5	27	7.90	+ 0.33	1.70	0	12	2	28	1	sw.	S. S. Fesler.	
Defuniak Springs.	Walton.	193	13	79.8	—	0.5	95	83	63	27	30	5.34	— 2.23	1.20	0	12	—	—	—	sw.	R. W. Storrs.	
DeLand.	Volusia.	27	14	79.8	—	0.4	94	24	67	47	24	7.25	—	2.35	0	14	9	7	15	sw.	O. B. Webster.	
Eustis.	Lake.	56	20	82.8	+ 0.6	100	12	69	47	26	5.80	— 1.49	2.06	0	10	14	8	9	se.	C. T. Smith.		
Federal Point.	Putnam.	5	19	80.8	—	0.1	97	6	66	37	36	5.56	+ 2.60	0.43	0	12	10	15	6	se.	E. S. Hubbard.	
Fenolloway.	Taylor.	75	4	80.7	—	—	99	4	60	30	11	5.53	—	2.60	0	13	0	18	13	sw.	Miss E. Wigglesworth.	
Fernandina.	Nassau.	10	18	80.2	—	0.8	95	21 ^t	65	21	28	3.18	— 3.96	0.46	0	10	—	—	—	se.	W. B. Duryee.	
Fort Meade.	Polk.	125	22	81.2	+ 0.6	95	20 ^t	65	5	28	5.89	— 0.12	2.00	0	18	8	20	3	ne.	G. L. Brodrick.		
Fort Myers.	Lee.	12	39	80.8	—	0.1	92	67	67	68	29	23	4.05	+ 4.17	0.35	0	7	25	5	e.	Miss M. M. Gardner.	
Fort Pierce.	St. Lucie.	6	10	79.5	—	0.4	95	22 ^t	68	47	24	7.25	— 3.32	0.95	0	10	—	—	—	sw.	T. C. Nicholson.	
Gainesville.	Alachua.	176	17	81.0	—	0.9	97	12	63	26	29	3.45	+ 4.01	1.18	0	12	11	17	3	se.	John Schnabel.	
Grasmere.	Orange.	175	13	80.3	—	1.8	96	24	66	35	25	8.21	— 0.02	0.02	0	19	—	—	—	sw.	J. B. Escott.	
Hilliard.	Nassau.	69	2	79.0	—	—	96	13	58	28	31	5.09	— 1.66	0.02	0	11	16	8	7	se.	B. A. Tibbits.	
Homestead.	Dade.	5	1	79.6	—	—	95	24	65	1	28	10.36	— 1.82	0.21	0	21	10	20	1	e.	W. J. Krome.	
Huntington.	Putnam.	56	13	—	—	99	10	—	—	—	6.53	— 0.02	1.58	0	12	—	—	—	s.	Miss M. P. Wise.		
Hypoluxo.	Palm Beach.	4	15	81.7	+ 0.3	96	22	67	1	26	3.32	— 2.17	1.29	0	10	14	2	2	e.	G. A. Angevine.		
Inverness.	Citrus.	43	11	80.2	—	0.2	92	6	69	8	21	10.00	— 1.19	3.65	0	14	22	9	sw.	W. H. Miller.		
Jacksonville.	Duval.	101	40	81.0	+ 0.1	94	1	68	28	20	2.35	— 3.85	0.87	0	14	5	18	8	w.	U. S. Weather Bureau.		
Jasper.	Hamilton.	152	10	79.8	—	1.5	101	12	60	27	30	5.66	— 0.97	1.10	0	16	6	11	14	sw.	Mrs. W. C. Caldwell.	
Johnstown.	Bradford.	125	11	80.4	—	0.9	97	6	60	27	35	3.94	— 4.08	0.97	0	14	10	20	1	sw.	A. M. C. Brasch.	

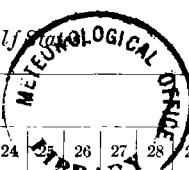
TABLE 1.—*Climatological data for July, 1911. District No. 2—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unadjusted.	Number of rainy days, 0.01 inch or more.
<i>Alabama.</i>															
Alaga.	Houston.	105	6												
Anniston.	Calhoun.	728	20	76.0	-1.9	96	2	54	27	32	6.10	+ 1.87	0.99	0	14
Ashville.	St. Clair.	685	18	76.6	-1.7	98	1	54	26	36	4.52	-0.47	1.11	0	17
Auburn.	Lee.	732	29	78.6	-1.1	97	2	58	26	31	2.20	-3.36	0.61	0	14
Benton.	Lowndes.	149	10												nw.
Bermuda.	Conecuh.	24		79.0	-1.0	95	1	56	27†	35	6.03	+ 0.94	1.53	0	13
Birmingham.	Jefferson.	701	23	76.5	-3.3	95	3	58	26	7.14	+ 2.44	1.75	0	13	
Calera.	Shelby.	500	10												w.
Camp Hill.	Tallapoosa.	738	10	77.1	-2.3	97	2	55	26	34	3.42	-1.91	0.54	0	14
Cedar Bluff.	Cherokee.	594	7												sw.
Citronelle.	Mobile.	331	23	79.0	-1.2	95	1	63	26†	27	8.07	+ 1.88	1.40	0	8
Clanton.	Chilton.	590	18	77.6	-2.1	95	1†	55	26†	33	2.66	-2.17	1.74	0	18
Cochrane.	Pickens.	100	1												sw.
Cordova.	Walker.	334	20	77.1	-2.0	97	2†	54	26	33	9.49	+ 4.27	2.10	0	13
Cullman.	Cullman.	802	3	75.5		97	2	54	26†	36	5.29		1.26	0	17
Dadeville.	Tallapoosa.	760	6												w.
Daphne.	Baldwin.	20	79.3	-1.5	92	27	63	29	26	10.49	+ 3.29	1.85	0	14	
Demopolis.	Marengo.	19													sw.
Eufaula.	Barbour.	200	27	76.8	-3.7	97	1	56	27†	33	8.69	+ 2.31	2.95	0	18
Evergreen.	Conecuh.	285	27	79.9	-0.6	99	30	56	28	35	3.74	-2.50	1.12	0	10
Fort Deposit.	Lowndes.	520	27	79.4	-1.7	94	1†	60	26	37	6.68	-1.43	1.10	0	12
Gadsden.	Etowah.	621	27	77.7	-1.8	99	3	55	27	31	3.11	-1.41	0.78	0	8
Goodwater.	Coosa.	826	16	78.0	-2.2	101	2	55	26†	34	5.68	+ 0.31	2.27	0	12
Greensboro.	Hale.	220	32	78.6	-1.7	94	23	61	26†	25	4.88	+ 0.95	2.15	0	11
Greenville.	Butler.	444	10												s.
Hamilton.	Marion.	15	77.04	-2.1	97	2	52	26	33	4.77	+ 0.41	1.10	0	9	
Highland Home.	Crenshaw.	19	78.6	-1.1	94	1	64	26	24	6.29	+ 0.85	2.44	0	14	
Livingston.	Sumter.	160	27	79.2	-2.1	95	2	60	26†	30	5.00	+ 0.55	2.00	0	7
Lock No. 4.	Talladega.	510	14	77.0	-3.0	98	2†	56	26†	38	7.44	+ 2.42	1.35	0	14
Maple Grove.	Cherokee.	18	78.1	-1.1	99	3	54	25	33	6.38	+ 1.47	1.00	0	13	
Mentone.	De Kalb.	1,595	4												e.
Milstead.	Macon.	8													w.
Mobile.	Mobile.	64	39	79.9	-0.6	92	9	66	26	32	7.53	+ 0.49	2.73	0	14
Montgomery.	Montgomery.	240	39	79.1	-1.9	95	2	62	27	27	4.19	-0.49	1.64	0	13
Newbern.	Hale.	18	79.6	-2.1	96	2†	58	26	31	5.17	+ 0.78	1.67	0	11	
Oneonta.	Blount.	857	17	74.6	-3.1	97	4	52	26†	35	8.30	+ 2.17	1.80	0	15
Opelika.	Lee.	817	32	78.1	-2.2	95	2	58	26	26	2.22	-2.82	0.60	0	9
Ozark.	Dale.	400	9	80.0		95	1	62	27	26	6.46		1.04	0	12
Prattville.	Autauga.	281	11	77.8	-2.5	93	1†	56	27	31	3.52		1.83	0	8
Pushmataha.	Choctaw.	20	79.5 ^b	-1.4	96	2									s.
Selma.	Dallas.	147	31	80.2	-1.3	98	1†	59	26	31	5.81	+ 1.12	1.70	0	13
Spring Hill.	Mobile.	312	7	80.2		95	1	64	26†	25	6.10		1.20	0	14
Talladega.	Talladega.	554	21	78.2	-2.1	99	2	56	26	31	7.05	+ 2.44	3.30	0	11
Tallassee.	Elmore.	20													nw.
Thomasville.	Clarke.	385	20	78.4	-2.8	97	8	56	26	38	5.80	+ 0.63	2.05	0	10
Troy.	Pike.	581	3	78.5		94	1†	61	26	29	9.77		0.65	0	18
Tuscaloosa.	Tuscaloosa.	230	30	79.2	-2.0	102	3	58	26	31	8.06	+ 3.58	2.10	0	14
Tuskegee.	Macon.	11	79.5	-2.1	100	3	58	26†	35	2.76	-1.75	0.99	0	8	
Union Springs.	Bullock.	216	24	79.0	-2.2	95	2	61	27	28	7.38	-1.62	0.95	0	14
Uniontown.	Perry.	273	25	78.2	-2.7	95	1	61	19†	28	4.44	-0.71	2.23	0	12
Valley Head.	De Kalb.	1,031	26	76.6	-0.5	101	3	51	27	36	6.02	+ 0.80	1.30	0	9
Wetumpka.	Elmore.	205	19	79.3	-2.4	98	2	57	27	32	3.97	-0.92	1.33	0	7
<i>Mississippi.</i>															
Aberdeen.	Monroe.	210	23	78.4	-2.2	97	2	56	26	30	5.83	+ 1.21	1.61	0	13
Agricultural College.	Oktibbeha.	424	21	78.0	-3.1	97	10	57	26	26	6.24	+ 1.61	1.48	0	14
Bay St. Louis.	Hancock.	28	18	79.6	-1.8	92	3†	64	25†	24	3.85	-3.03	1.10	0	13
Biloxi.	Harrison.	24	20	80.6	-1.3	92	3	66	27†	23	5.02	-1.43	2.15	0	9
Booneville.	Prentiss.	504	17	77.2	-2.6	94	2†	58	26†	26	9.65	+ 5.05	4.46	0	11
Brookhaven.	Lincoln.	500	23	79.0	-2.6	96	2†	59	27	29	7.62	+ 2.13	1.96	0	20
Columbia.	Marion.	110	7												sw.
Columbus.	Lowndes.	191	23	79.6	-2.6	99	2	57	26	31	6.79	+ 2.03	1.75	0	11
Crystal Springs.	Copiah.	408	19	78.6	-2.4	94	2†	58	27	29	7.36	+ 1.43	1.71	0	18
Edinburg.	Leake.	3	78.2			96	2†	55	26	35	5.05		0.98	0	16
Enterprise.	Clarke.	248	6												w.
Fulton.	Itawamba.	2													s.
Hattiesburg.	Forest.	189	18	81.0	-1.2	100	2	60	27†	32	8.52	+ 1.84	3.14	0	9
Hazlehurst.	Copiah.	460	21	78.3	-2.6	95	1	59	27	28	7.47	+ 2.60	1.12	0	20
Hickory.	Newton.	326	1												w.
Jackson.	Hinds.	280	24	79.0	-2.3	96	2†	58	27	29	6.05	+ 1.64	1.71	0	18
Lake.	Scott.	446	23	77.8	-2.1	95	2†	55	27	32	6.68	-0.45	0.80	0	12
Lake Como.	Jasper.	8	78.6			97	2	57	25†	35	9.76		1.58	0	17
Laurel.	Jones.	241	7	79.0		98	23	58	27	31	6.01		1.05	0	17
Leakesville.	Greene.	17	79.8	-1.5	95	1†	60	26†	30	7.65	+ 0.22	1.60	0	13	
Louisville.	Winston.	561	22	77.6	-1.9	95	3	57	26	28	6.02	+ 1.15	1.42	0	13
McNeill.	Pearl River.	230	8	78.6 ^d		93	2†	62	29	28	8.94		2.40	0	13
Macon.	Noxubee.	185	23	78.8	-2.8	98	3	58	26	28	7.06	+ 1.94	2.35	0	11
Magnolia.	Pike.	415	15	78.6	-2.7	93	2	61	27	27	7.71	+ 0.13	1.86	0	19
Meridian.	Lauderdale.	375	21	77.4	-2.6	94	1	59	27	27	5.78	+ 1.28	2.27	0	15
Merrill.	Greene.	76	6												n.
Monticello.	Lawrence.	209	4	79.4		96	2	57	27	33	7.08		1.45	0	20
Okolona.	Chickasaw.	311	23	78.6	-3.6	99	2†	57	26	29	6.38	+ 2.44	2.27	0	13
Pascagoula.	Jackson.	15	2	80.0		92	2†	64	23	8.88		3.12	0	11	
Pearlington.	Hancock.	10	23	78.6	-2.3	92	3	63	27†	25	10.92	+ 4.10	4.39	0	12
Porterville.	Kemper.	6	78.8			98	2	56	26†	33	3.19		0.87	0	9
Shubuta.	Clarke.	197	6												sw.
Tupelo.	Lee.	278	12												s.
Waynesboro.	Wayne.	191	24	77.7	-3.2	93	2	58	27†	31	11.44	+ 6.43	3.00	0	18
Woodland.	Chickasaw.	2													

*., °, °, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the

TABLE 2.—*Daily precipitation for July, 1911. District No. 2, South Atlantic and ee*



Stations.	Watershed.	Day of month.																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
<i>Virginia.</i>																																	
Arvonia	James		T.	.02																													1.06
Ashland	do																																1.41
Bedford City	do																																2.74
Buchanan	do																																3.47
Callaville	Chowan																																1.85
Cape Henry	Coast																																1.90
Catawba	Roanoke																																6.63
Charlottesville	James																																2.96
Clarksville	Roanoke																																1.78
Columbia	James																																1.22
Covesville	do		T.																														1.00
Danville	Roanoke																																3.14
Diamond Springs	Coast																																3.44
Hampton	do																																2.44
Hot Springs	James																																0.02
Ivor	Chowan																																2.49
Lassiter	James																																3.25
Lexington	do																																2.33
Lynchburg	do																																5.53
Newcastle	do																																5.07
Norfolk	Coast																																5.10
Petersburg	do																																1.57
Randolph	Roanoke																																2.34
Richmond	James																																0.57
Rocky Mount	Roanoke																																0.85
Saxe	do																																2.61
Spottsylvania (near)	Chowan																																1.83
Williamsburg	James																																5.60
<i>North Carolina.</i>																																	
Albemarle	Pedee																																1.31
Beaufort	Bogue Sd.																																1.91
Belhaven	Pungo																																3.15
Brewers	Pedee																																2.46
Caroleen	Santee																																2.73
Chalybeate Springs	Cape Fear																																0.02
Charlotte	Santee																																3.73
Chimney Rock	do																																2.86
Durham (near)	Neuse																																1.89
Eagletown	Chowan																																6.95
Edenton	Albemarle Sd																																2.90
Elizabethtown	Cape Fear																																0.70
Enfield	Tar																																3.93
Fayetteville	Cape Fear																																2.59
Goldsboro	Tar																																2.21
Graham	Tar																																2.22
Greensboro	Tar																																4.03
Greenville	Hatteras																																1.03
Henderson	Pamlico Sd.																																8.11
Kinston	Tar & R'oke																																2.00
Kings Mtn. (near)	Santee		T.																													2.45	
Kinston	do																																1.35
Lenoir	Santee																																3.82
Lincolnton	do																																0.99
Louisburg	Tar																																5.84
Lumberton	Lumber																																3.75
Manteo	Roanoke Sd.																																1.92
Marion	Santee																																0.04
Middletown	Pamlico Sd.																																2.82
Moncure	Cape Fear																																3.81
Monroe	Pedee																																1.96
Morganton	Santee																																0.68
Mount Airy	Pedee																																2.85
Mount Holly	Santee																																2.37
Nashville	Tar																																5.08
Newbern	do																																4.26
Pinehurst	Lumber																																0.85
Raleigh	Neuse																																2.95
Ramseur	Cape Fear																																1.66
Randleman	do																																1.80
Reidsville	Tar																																2.43
Rocky House	Savannah																																2.47
Rocky Mount	Tar																																2.47
Salisbury	do																																2.47
Saxon	Roanoke																																2.01
Scotland Neck	Tar																																

TABLE 2.—*Daily precipitation for July, 1911. District No. 2—Continued.*

TABLE 2.—*Daily precipitation for July, 1911. District No. 2—Continued.*

TABLE 2.—*Daily precipitation for July, 1911. District No. 2—Continued.*

* Precipitation included in that of the next measurement.

[†] Separate dates of falls not recorded.
^{**} Precipitation for the 24 hours ending

Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

T. Precipitation is less than 0.01 inch rain or melted snow

TABLE 3.—Maximum and minimum temperatures at selected stations, July, 1911. District No. 2, South Atlantic and east Gulf States.

Date.	Virginia.								North Carolina.												South Carolina.							
	Lynchburg.		Norfolk.		Richmond.		Saxe.		Charlotte.		Edenton.		Fayetteville.		Hatteras.		Newbern.		Raleigh.		Reidsville.		Salisbury.		Wilmington.		Charles-	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	89	65	86	70	89	65	93	59	91	71	87	61	95	69	80	67	89	63	91	67	95	66	96	68	86	75	85	73
2....	95	65	90	70	95	67	98	70	94	71	87	63	96	70	83	69	90	63	92	69	99	65	97	68	86	72	85	72
3....	97	73	91	68	97	72	100	71	95	72	87	71	86	70	83	74	90	66	85	71	97	68	95	68	85	74	87	76
4....	93	71	90	73	95	73	94	73	91	69	90	76	93	71	84	74	92	67	90	71	95	68	94	67	86	74	85	77
5....	92	69	91	72	95	71	95	72	93	71	91	72	93	67	85	76	93	69	90	69	95	66	96	70	86	76	86	78
6....	96	72	92	73	96	72	98	75	92	71	90	73	93	69	84	76	93	69	92	70	98	68	96	68	87	72	86	76
7....	96	70	94	74	100	74	100	76	93	70	92	73	95	71	85	76	94	69	94	72	98	70	98	68	88	75	85	75
8....	87	69	94	75	95	70	95	73	85	73	92	72	88	70	85	75	93	68	90	73	96	69	91	71	86	72	86	76
9....	90	69	93	74	94	71	96	73	86	69	93	72	95	68	86	74	92	68	93	70	96	67	98	68	88	74	86	79
10....	93	73	97	73	97	73	99	75	88	70	92	70	96	72	88	77	96	69	94	72	98	68	92	70	90	73	88	78
11....	92	68	97	75	97	73	100	74	93	71	95	78	98	74	88	77	97	71	98	73	102	71	96	71	93	75	91	77
12....	89	72	89	70	91	70	93	73	87	70	93	70	92	71	86	75	95	72	91	70	92	70	88	72	90	75	82	75
13....	91	69	86	69	91	68	96	74	86	69	86	72	87	71	88	75	89	68	86	70	99	68	94	69	91	72	88	73
14....	86	76	86	69	83	68	85	72	85	70	82	72	79	69	84	72	91	67	80	69	89	66	86	68	91	73	86	73
15....	88	64	84	70	90	66	92	67	88	69	85	75	84	68	81	73	89	65	85	68	90	63	89	66	82	71	84	73
16....	87	62	88	72	90	68	90	65	88	65	87	74	90	66	84	72	89	66	87	68	91	64	89	63	85	71	86	75
17....	84	70	84	69	85	70	91	62	84	70	83	70	86	67	86	73	90	66	88	70	89	67	90	68	85	71	89	74
18....	81	64	79	71	82	66	85	62	86	67	80	70	88	71	82	72	89	66	87	68	92	64	82	64	86	71	88	71
19....	84	62	82	71	87	64	90	69	88	69	82	68	87	66	82	73	88	66	87	68	90	67	88	66	86	73	86	73
20....	91	65	90	72	94	68	93	62	88	70	88	75	91	70	87	72	91	65	88	69	92	66	88	72	88	72	88	74
21....	86	71	85	73	92	68	94	74	85	72	85	70	92	72	82	73	90	70	88	71	94	70	91	71	90	75	94	75
22....	87	65	84	73	87	68	94	78	93	70	89	75	96	71	88	72	94	67	92	70	97	69	92	74	92	75	88	75
23....	87	58	86	71	89	63	96	66	94	69	92	67	98	66	90	68	96	66	93	64	95	63	90	68	88	75	88	75
24....	91	76	91	75	95	75	97	79	89	74	92	73	96	75	87	75	93	71	92	71	97	74	96	71	90	78	93	78
25....	79	64	83	70	86	64	87	61	83	64	85	71	89	69	84	75	91	70	87	72	93	67	88	68	84	74	86	72
Mns..	88.3	66.4	87.4	71.1	90.9	68.2	93.6	69.1	88.7	68.9	87.8	71.9	91.2	68.8	84.7	73.3	91.0	67.0	88.8	68.7	93.6	66.4	92.1	66.8	87.4	72.1	87.3	74.0

Date.	South Carolina.								Georgia.																			
	Columbia.		Conway.		Ferguson.		Georgetown.		Green-		New-		Society		Albany.		Atlanta.		Augusta.		Dah-		Macon.		Rome.		Savannah.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	90	71	91	73	93	73	90	72	91	73	92	70	93	71	98	72	96	71	93	73	93	68	97	72	96	67	90	71
2....	94	72	90	69	93	76	90	72	93	68	95	70	92	72	96	74	89	70	93	74	90	75	95	70	87	75	90	74
3....	94	73	89	70	92	69	90	72	94	68	91	72	90	70	92	72	94	73	94	74	94	63	92	72	98	70	89	74
4....	91	73	73	70	90	70	92	69	87	68	88	70	91	68	86	72	92	70	90	73	90	65	87	71	96	74	87	74
5....	91	70	89	69	90	68	92	70	87	67	91	68	91	68	92	70	86	69	91	71	87	71	93	69	86	72	86	72
6....	94	71	90	70	87	68	93	71	90	66	96	71	94	71	92	70	89	68	93	72	90	65	94	67	87	72	90	76
7....	93	72	91	70	89	68	92	67	87	67	92	70	94	70	93	69	89	67	92	72	92	64	91	71	85	71	87	76
8....	89	71	89	71	93	69	93	74	88	70	94	71	88	72	88	71	85	68	88	72	88	68	89	72	86	72	86	72
9....	89	70	90	70	95	76	93	74	80	71	91	71	90	70	89	71	87	67	85	73	85	65	87	70	85	70	86	70
10....	92	72	93	69	97	70	93	76	85	71	96	70	91	73	92	72	83	69	90	72	87	68	87	72	93	69	90	75
11....	92	73	98	73	98	72	97	75	88	71	98	72	93	73	94	71	88	69	93	73	90	67	90	72	91	70	92	74
12....	94	72	95	75	92	82	96	74	97	72	91	70	96	71	97	72	87	73	93	78	88	72	93	70	91	73	92	73
13....	80	71	92	71	88	72	91	70	85	72	91	71	87	69	92	72	86	69	92	78	84	67	83	73	94	70	88	71
14....	79	69	82	68	84	78	90	68	82	69	85	70	89	67	88	74	82	69	87	76	86	69	89	70	85	69	86	70
15....	83	70	82	70	86	68	81	65	85	71	81	70	80	67	85	71	88	66	87	73	85	65	87	73	86	69	87	

MONTHLY WEATHER REVIEW.

JULY, 1911

TABLE 3.—Maximum and minimum temperatures for July, 1911. District No. 2—Continued.

Date.	Georgia.						Florida.														Tallahassee. §§		Tampa.			
	Thomasville.		Waycross. §§		West Point. §§		Avon Park.		Fort Myers.		Gainesville. §§		Jacksonville.		Key West.		Miami.		Ocala. §§		Orlando.		Pensacola.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.			Max.	Min.	Max.	Min.
1.....	97	71	97	70	98	72	97	71	90	74	96	70	94	74	87	78	92	72	95	75	88	76	92	70	90	76
2.....	92	70	93	71	97	74	93	71	90	74	91	75	90	75	88	77	86	71	87	75	89	78	91	72	85	75
3.....	90	70	92	70	92	71	87	70	88	72	92	69	89	74	84	72	87	72	93	71	86	79	87	69	86	71
4.....	85	70	91	71	89	75	92	70	88	73	93	67	90	74	88	76	88	72	94	68	87	73	84	70	86	69
5.....	90	67	94	68	90	69	91	67	85	70	94	68	89	72	88	79	89	71	95	68	82	70	87	67	88	68
6.....	91	69	95	71	90	68	94	73	92	74	96	67	90	73	88	74	88	78	97	70	93	74	82	68	88	70
7.....	90	67	94	68	90	68	87	72	89	70	94	69	90	70	87	76	86	71	94	70	88	71	83	69	88	70
8.....	88	71	87	69	88	71	86	71	86	71	88	70	84	73	86	78	83	72	94	69	87	70	88	71	89	71
9.....	86	72	89	72	88	69	89	73	90	72	91	73	84	74	88	78	87	79	91	73	87	72	86	73	89	74
10.....	93	70	93	69	87	71	91	72	92	72	96	72	89	75	87	76	87	79	95	71	92	71	86	75	89	71
11.....	94	70	94	71	91	70	92	72	87	71	95	71	92	74	87	74	88	78	96	71	94	70	87	76	90	74
12.....	93	70	96	70	90	70	90	70	90	71	97	70	93	74	87	77	88	78	96	71	96	71	85	77	92	74
13.....	94	70	95	71	89	68	93	71	87	72	93	70	92	75	85	75	89	73	97	71	95	73	86	75	91	71
14.....	89	70	90	71	82	70	93	70	89	69	92	67	90	70	86	74	88	74	92	69	92	69	89	78	91	71
15.....	84	69	88	70	81	71	92	71	89	70	89	67	86	71	88	79	89	80	90	70	93	70	84	72	87	72
16.....	88	68	90	69	84	84	89	69	90	73	89	69	86	72	88	79	88	80	90	70	91	70	81	67	89	71
17.....	82	70	85	72	87	71	92	70	88	74	80	70	82	72	88	79	89	75	91	72	84	72	86	74	88	76
18.....	83	70	85	71	82	66	91	70	90	74	86	71	87	71	89	79	89	80	92	71	93	71	82	70	90	74
19.....	89	69	92	69	85	70	95	74	90	74	91	71	90	75	88	78	90	73	92	73	94	72	86	70	90	75
20.....	92	69	92	70	90	70	94	72	92	72	91	71	93	75	89	80	91	72	93	72	97	72	85	77	90	74
21.....	90	74	92	73	83	70	93	72	92	75	91	70	93	75	89	78	91	74	95	72	95	74	88	78	90	75
22.....	82	70	86	74	78	69	91	71	90	74	89	73	90	72	88	74	91	75	93	74	89	75	80	74	87	79
23.....	91	71	89	71	85	69	93	74	92	73	92	71	91	74	89	73	90	77	92	72	91	75	84	79	90	80
24.....	91	76	92	71	90	73	96	72	91	73	93	72	92	75	89	80	91	77	95	74	96	74	86	76	90	80
25.....	80	67	86	77	85	69	90	72	92	74	90	74	91	75	89	78	91	74	92	74	92	74	81	75	89	76
26.....	85	63	87	64	83	58	89	71	92	75	95	73	89	72	88	79	91	74	95	72	95	74	88	78	90	75
27.....	88	60	90	58	86	58	85	73	85	71	90	69	87	68	88	79	89	71	95	71	95	70	84	65	85	71
28.....	90	60	93	60	92	58	83	69	89	72	93	66	88	68	87	73	89	73	92	73	95	72	86	68	85	72
29.....	91	65	93	61	90	62	91	69	91	68	94	69	86	73	87	74	89	72	92	71	90	69	86	73	90	67
30.....	92	70	94	66	93	65	90	71	89	70	93	71	87	73	89	77	90	72	92	70	85	71	88	71	91	70
31.....	85	69	92	72	91	71	87	71	87	72	91	69	88	73	88	72	90	70	93	70	89	76	85	70	90	72
Mus.	88.9	68.9	91.2	69.4	87.9	68.6	90.8	71.1	89.4	72.2	91.8	70.1	89.1	72.9	87.7	76.7	88.8	74.6	93.2	71.3	91.0	71.9	85.0	74.2	86.5	69.8
Means.....	86.5	65.4	89.3 ^a	68.7 ^a	85.6	67.4	86.7	67.0	86.7	73.0	88.1	70.1	89.3	69.1	87.6 ^a	68.9 ^a	90.2	68.9	92.6	69.4	88.8	69.3	86.6	68.3	88.1	59

Date.	Alabama.												Mississippi.											
	Anniston.		Bermuda.		Birmingham.		Eufaula. §§		Mobile.		Montgomery.		Tuscaloosa. §§		Uniontown.		Columbus. §§		Hattiesburg. §§		Jackson.		Meridian.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	95	64	95	71	92	69	97	68	89	74	95	74	95	71	95	72	97	69	96	69	95	71	94	70
2.....	96	68	94	71	93	69	96	70	90	75	95	74	99	71	94	74	99	71	100	70	96	72	93	72
3.....	94	69	91	73	95	74	88	68	88	78	90	72	102	73	91	74	97	73	94	72	96	74	94	70
4.....	93	70	93	70	92	69	85	69	88	75	91	72	94	74	92	71	96	73	98	69	92	68	90	68
5.....	90	67	87	72	88	69	88	68	84	74	90	70	89	72	87	71	93	73	88	70	88	70	85	69
6.....	88	66	84	70	85	68	86	67	79	69	86	70	84	74	87	71	77	70	84	70	88	72	86	69
7.....	88	68	84	68	86	70	91	66	85	73	90	69	85	71	86	76	86	71	86	71	88	72	86	69
8.....	89	67	93	68	90	68	88	68	90	75	90	72	86	69	89	72	86	68	92	69	96	76	86	67
9.....	85	66	92	68	87	70	85	65	92	74	90	73	87	72	90	71	91	71	92	70	93	66	88	70
10.....	88	69	88	70	89	69	85	70	87	74	89	72	90	71	91	70	95	73	95	68	94	70	92	68
11.....	88	68	87	69	88	70	88	69	87	76	90	72	92	72	92	70	96	72	97	70	93	73	91	70
12.....	88	71	90	71	86	70	88	69	85	75	91	70	91	7										